Retrospects

LYMPHOBLASTOMA

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The word lymphoblastoma is employed in a recent article by Minot and Isaacs to include lymphatic luekæmia, its aluekæmic form (pseudo-luekæmia) lymphoblastoma, and Hodgkin's disease. The paper is based on a study of 477 cases, which do not include lymphatic luekæmia, as this is studied elsewhere. Of this series the diagnosis has been corroborated in 401 cases by post mortem examination.

The authors emphasize the importance of abdominal symptoms occurring either as the initial complaint or early in the disease. Involvement of lymphoid tissue within the abdomen, was noted by Hodgkin in 1832, and by Wilks in 1865. Symmers in his paper on Hodgkin's disease states that commencement in the cervical nodes is by no means the rule, but that the disease commonly originates in the abdomen.

In this series 119 cases had as their first symptom one referable to the abdomen, while a further seventy-one cases all showed symptoms early in their course pointing to abdominal disease. Of these 119 cases, the initial symptom in forty-three was pain in the abdomen, pain in the back in twenty-seven, marked gastric symptoms in fifteen, intestinal symptoms in seven, pain in the legs in nine, œdema of the legs in three, enlarged inguinal glands in nine, and pain in the groin in four, frequency and nocturia in two. In addition a goodly number showed these symptoms early in the disease.

Abdominal pain was frequently of marked severity. The site was variable, occurring as commonly in one part of the abdomen as another, except that in the left lower quadrant it was rarely felt. Sometimes gall bladder disease was simulated by diseased lymph nodes in the region of the larger bile ducts or lymphoblastoma within the jejunum or lower duodenum.

Pain in the back was often very intense, frequently felt in the lower part of the back, sometimes vice-like or cramp-like, or of a dull persistent intensity, and influenced by changing the position. In 30 per cent of these, x-ray showed arthritis of the spine, but the authors do not ascribe the pain to this cause, as the pain often was markedly alleviated by x-ray or radium treatment.

The gastro-intestinal symptoms included epigastric distress, frequently after meals and sometimes severe; or symptoms leading to a diagnosis of appendicitis, the operation revealing lymphoblastoma in this organ or in adjacent structures; nausea and various symptoms due to intestinal gas commonly occurred, vomiting rarely. Heartburn was uncommon, and decreased or absent free hydrochloric acid was the rule where lymphoblastoma of the gastro-intestinal tract existed.

The intestinal symptoms included pain, diarrhœa, constipation, distension and soreness of the colon. Gastro-intestinal symptoms often existed for a long time before other evidence of lymphoblastoma developed.

Jaundice developed in six per cent of the cases from compression of the larger bile ducts, and from infiltration of the liver. It was apt to fluctuate in degree. Enlargement either of the liver or spleen, or both, occurred frequently, but seldom early in the disease.

Pains in the legs occurred as the initial symptom in 8 per cent, and as an early symptom in 28 per cent of the 119 cases which are the subject of this paper. Often they were associated with pain in the back. The pains were of a varying character, and were due to pressure on different nerves within the abdomen. More commonly the pain was referred down the back of the legs.

Another symptom was *œdema of the legs*, where pressure by lymphoblastomatous masses caused obstruction to blood and lymphatic flow. In such cases, enlarged lymph nodes were usually present in the groin or lower abdomen, though they might not appear until later. Nearly always, enlarged glands in the groin and pain denoted disease within the abdomen, but in

* Lymphoblastoma, George R. Minot and Raphael Isaacs, *Amer. Jour. Med. Sc.*, August, 1926.

some cases preceded by many months the appearance of other symptoms.

Among the general symptoms, *fever,* though it did occur coincidently with early abdominal symptoms, was not the rule. It was more frequent and of a higher degree in patients with internal lymphoblastoma; these cases were generally the ones to give the Pel-Ebstein type of temperature curve. Itching of the skin and various skin lesions were frequently noted.

Abdominal masses were detected in forty-two cases, or 35 per cent of the 119 cases with initial symptoms referable to the abdomen, when they first reached the clinic. In some cases the presence of abdominal masses was doubtful, even a year after the commencement of symptoms, but was verified by operation.

Lymphoblastoma remained confined to the abdomen in only 11 per cent of the 119 cases, but in some of these the course of the disease was cut short by surgical interference. The enlargement of nodes in the groin was a distinct aid in establishing a diagnosis, though the degree of enlargement was often not marked, and had frequently been disregarded by physicians referring the cases. In 27 per cent, the inguinal nodes enlarged early; in 58 per cent late. Enlarged glands in other localities were recorded in 23 per cent of the cases, while x-ray study not infrequently revealed enlarged mediastinal glands in cases presenting abdominal and back symptoms.

Lymphosarcoma and pseudo-leukæmia are forms of lymphoblastoma which occur commonly between the ages of thirty-five and forty-five years, and are prone to involve the gastro-intestinal tract. Cases with these conditions frequently showed as the initial symptom one pointing to the abdomen. On the other hand, Hodgkin's disease is one of youth, and symptoms pointing to the abdomen were more apt to occur later.

Lymphoblastoma originating within the abdomen is often silent for considerable periods before there are any symptoms. After pain and other symptoms appear, the prognosis is for a relatively brief life. But of these 119 cases, 13 per cent had had their disease over four years and 8 per cent for over six years. Irradiation appeared to alleviate, but did not materially affect the course of the disease. In one or two instances radical surgical operation apparently prolonged life.

Ætiology of Cardiac Disease.—The Long Fox Memorial Lecture, delivered by Carey F. Coombs, and published this year in the spring number of the *Bristol Medico-Chirurgical Journal,* dealt with the ætiology of cardiac disease. Coombs regards the intramyocardial lesion known as the submiliary nodule as a characteristic of rheumatic carditis. Changes similar to those seen in the submiliary nodule may be found in any rheumatic lesion, the essential features being a proliferative reaction, characterized especially by formation of giant cells, with a mild leucocytosis, on a background of fibrin. The heart in rheumatic infection is attacked in all its parts at once, the result being a pancarditis. In ulcerative endocarditis, the myocardium is rarely injured, and the pericardium never suffers. Streptococci of intestinal derivation doubtless produce both diseases. Experimental streptococci infections usually produce an endocarditis; masses of organisms are brought into direct contact with the endocardium. Repeated small invasions of intestinal streptococci favour an immunity which must be broken down through some conspiracy of factors (age, heredity, geography, season, economic circumstances, etc.), before a "natural" infection can result, and such infection is through the coronary vessels. Such a combination of factors is impossible in experimental work, and accounts for failure to demonstrate effectively the relationship of the streptococcus fæcalis to the causation of the rheumatic heart. The influence of conspiring factors demands much attention, as also in the case of that other pancarditic infection, cardiac syphilis. The same is to be said of the senile heart, and it is to be noted that bacterial toxins generated by persistent respiratory infections are particularly damaging to the myocardium of old persons.